Nuclear Engineering Catalog 2021 Radiological Concentration

| all | Math 141 or 147 (4) FA, SP, SU | Chem 122(3) and 123(1) or 128 (4) FA, SP, SU | EF 151 or 157 (4) FA, SP | EF 105 (1) FA, SP | English 101/118 or 198 or 131 (3) FA, SP, SI | |
|----------|-------------------------------------|--|--|---|---|--------------------------------|
| 6 hours | Prereq- Math ACT 28 or | Prereq-Math 119; recommended | Coreq- Math 132/141/147 or higher | Coreq- EF 151 or 157 | 101 Regular; 118 Honors; 198 Chancellor Hor | ors Only; |
| | Math SAT 660 | background in Math 131 | and EF 105 or CS 101 or CS 102 | | 131 English as Second Language | |
| pring | Math 142 or 148 (4) FA, SP, SU | Chem 132(3) and 133(1) or 138 (4) FA, SP, SU | EF 152 or 158 (4) FA, SP, SU | English 102 or 290 or 298 or 132 (3) FA, SP, SU | | |
| 15 hours | Prereq- Math 132 or 141 or 147 | Prereq- Chem 122 and 123 or 128 | Prereq-EF 142/151/157 with C or higher | 102 Prereq 101 or 118; 290 Prereq AP 101 | 102 Prereq 101 or 118; 290 Prereq AP 101 credit | |
| | | | Coreq- Math 142 or 148 | 298 Prereq Chancellor Honors only & 198; 132 Prereq 131 ESL | | |
| | | | | | | |
| all | Math 231 or 237 (3) FA, SP, SU | NE 200 (2) FA | ME 202 (2) FA, SP, SU | Physics 231 (3) FA, SP, SU | | ECON 201 or 207 (4) FA, SP, SU |
| 16 hours | Prereq- Math 142 or 148 | | Coreq- EF 152 or 158 and | Prereq- Phys 135 or EF 151 and 152 | Prereq- EF 105 or CS 102 | Social Science |
| | | | Math 142 or 148 | Coreq- Math 142 or 148 | Coreq- EF 152/158 | |
| Spring | Math 241 or 247 (4) FA, SP, SU | NE 233 (3) SP | ME 331 (3) FA, SP, SU | Physics 232 (4) FA, SP | NE 250 (3) SP | |
| 17 hours | Prereq- Math 142 or 148 | Prereq-NE 200 | Coreq- Math 241 or 247 | Prereq- Physics 231 | Prereq- NE 200, Math 231 or 237 | |
| | | | | Coreq- Math 241 or 247 | Coreq- Math 241 or 247 | |
| | | | | | | |
| all | NE 342 or 347 (3) FA | NE 362 or 367 (3) FA | Physics 341 (3) FA | Gen Ed (3) FA, SP, SU | Gen Ed (3) FA, SP, SU | 1 |
| 5 hours | Prereq- Math 241 or 247 | Prereq- Math 231/237, 241/247, NE 250 | Prereq- Physics 232 or 250 | Cultures and Civilizations | Social Science | |
| | | ······ | · · · · · · · · · · · · · · · · · · · | | | |
| pring | NE 401 WC (4) SP | Technical Elective *(3) FA, SP, SU | NE 470 (3) FA, SP | Stats 251 (3) FA, SP, SU | Technical Elective *(3) FA, SP, SU | |
| 16 hours | Prereq-English 102, 132, 290 or 298 | Petition required in advance | Prereq- NE 362 or 367 | Prereq- Math 142 or 148 | Petition required in advance | |
| | and NE 233 and NE 250 | | | | | |
| | Coreq- Math 241or 247 | | | | | |
| | | | | | | |
| all | NE 400 (OC) (1) FA, SP | NE 402 or 427 (WC) (4) FA, SU | NE 490 (3) FA | NE 471 (1) FA | Technical Elective *(3) FA, SP, SU | Gen Ed (3) FA, SP, SU |
| 5 hours | Minimum student level — senior | Prereq- NE 401 and 470 | Prereq- NE 233 or 433 | Prereq- NE 470 | | Arts and Humanities |
| | | | | | | |
| | NE 406 or 467 (3) SP | NE 472 (3) SP | Technical Elective *(3) FA, SP, SU | Gen Ed (3) FA, SP, SU | Gen Ed (3) FA, SP, SU | 1 |
| Spring | | | | | | |

*Technical Electives are selected from upper division mathematics, chemistry, physics and engineering courses and must be pre-approved by the department. Courses in Nuclear Engineering other than 500, 502 or 598

may also be used as technical electives.

Full Status Progression

A lower-division student may apply for progression to upper division after completing CHEM 122/123 or 128*, CHEM 132/133 or 138*, MATH 132/141/147*, MATH 132/148*, MATH 231/237, EF 151/157*, EF 152/158*, and PHYS 231*, with a grade of C or better in each, and an overall GPA of at least 2.5.

Provisional Status Progression

Students who have completed CHEM 122/123 or 128*, CHEM 132/133 or 138*, MATH 132/141/147*, MATH 142/148*, MATH 231/237, EF 151/157*, EF 152/158*, and PHYS 231* with a grade of C or better and have an overall GPA between 2.0 and 2.5 may apply for provisional status. The granting of provisional status is based on the availability of space in departmental programs after full status students have been accommodated. Provisional status students are required to demonstrate their ability to perform satisfactorily in upper-division by attaining a minimum GPA of 2.5 in the first 9 hours of 300-level required nuclear engineering courses. Award of upper-division full status is dependent upon this performance. Students who have not progressed to upper-division will be dropped from departmental courses.

Nuclear Graduation Requirements

Students are required to maintain a cumulative grade point average of at least 2.0 in all nuclear engineering courses taken at the Unversity of Tennessee, Knoxville used to satisfy the graduation requirement. No more than four (4) credit hours of required nuclear engineering courses in which a C- or lower is the highest grade earned may be counted toward graduation. This is in addition to the university's graduation requirements. Students are strongly recommended to meet with their faculty advisor every semester.

Students also have opportunities for an Honors Concentration and/or a five year BS/MS program. See the Undergraduate Catalog for details and requirements.